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Research Article

WOUND DEHISCENCE RATE IN INCISION OF EMERGENCY LAPAROTOMY

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Abstract:

Objective: To determine the wound dehiscence frequency after emergency laparotomy.

Design & Duration: This is a prospective observational-type study. The study was launched in July 2018 and completed for six months in December 2018.

Setting: This study was carried out at the jinnah hospital lahore.

Patients and Methods: This study included patients who worked in the emergency room, irrespective of age and gender, during the study. Patients with malignancy, immune compromise or chemo- or radiation therapy were not included in this review. In this report, consent was obtained from all cases and the ethics committee also obtained permission. Patients were prepared before surgery and both baseline and special investigations were conducted where necessary. Middle line incision worked for various indications and abdominal wall closure was performed in all cases in the same way with continuous proline-1 stitches. Demographic data including age, gender, symptom period and methods of standard deviation were published.

Results: There were 100 male and 50 female cases out of a total of 150 cases. There were 30 cases between 15 and 25 years of age, 38 between 25 and 35, 44 between 36-45, 28 between 45 and 55 and 10 between 55 years of age. In 23 cases, wound dehiscence was detected by 15 male and eight female cases. The cause of laparotomy was typhoid perforation in 40 cases, tuberculous intestinal perforation in 34 cases, perforated appendix in 26 cases, and abdominal trauma in 50 cases.

Conclusion: Wound dehiscence after emergency laparotomy is normal in our hospitals due to insufficient close-off or increased infection rates of emergency causing surgical infection and wound dehiscence.

Key Words: wound infection, emergency laparotomy, laparotomy, Wound dehiscence

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INTRODUCTION:

Intestinal perforation due to typhoid or T.B leading to peritonitis is an indication of emergency laparotomy. These patients should be operated on immediately, as the peritonitis mortality rate is very high. Initial steps for managing such patients are immediate fluid resuscitation, antibiotic coverage, stomach decompression and urinary catheterization, with input and output monitoring. Abdominal trauma, which is very common in our country due to the high rate of roadside accidents, is another common laparotomy indication. Due to 24 hours of work o.t, the rate of infection in emergency wards is usually higher than elective operation theatres, and infected cases are frequently operated here, so wound infections are common in laparotomy patients in such conditions, which can lead to wound dehiscence.

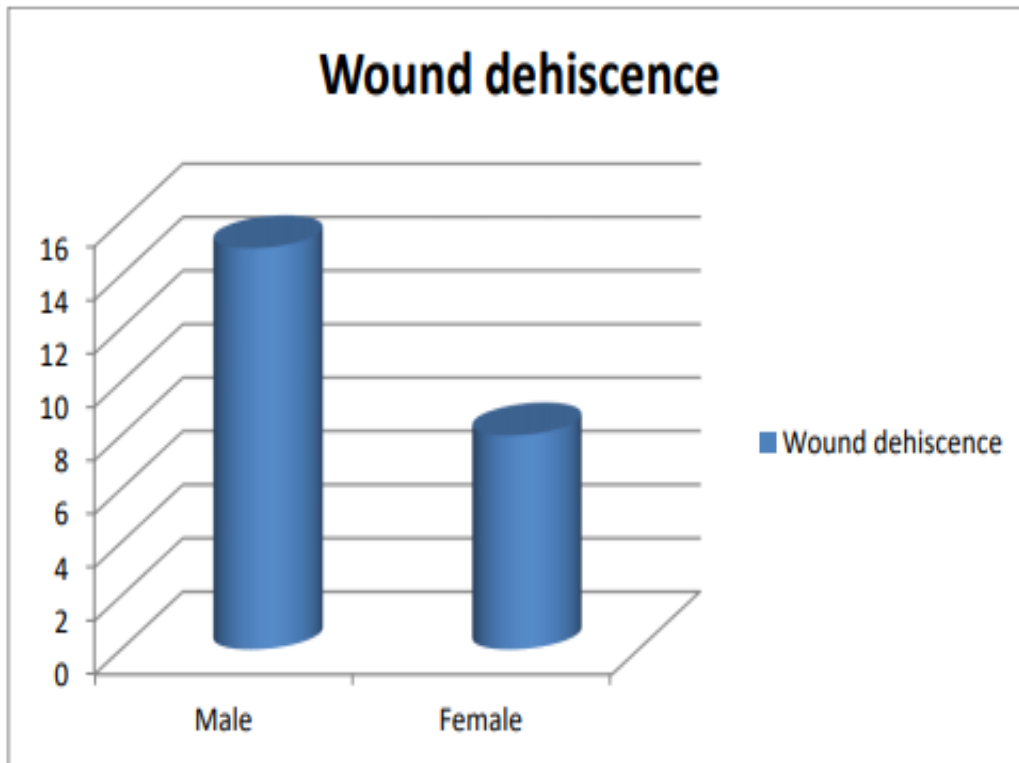
PATIENTS AND METHODS:

This prospective observational study was conducted in a hospital attached to the Allama Iqbal Medical College in Lahore over six months. It is a 24-hour tertiary care hospital with a working emergency department where many operations are performed daily. This study included patients operating in the emergency department during the study's duration, regardless of age and gender. This study did not include patients with any malignancy,

immunosuppression, or taking chemotherapy or radiation therapy. In this study, consent was taken from all cases, and permission was also taken from the ethical committee. Before surgery, patients were prepared, and the entire baseline and special investigations were carried out where indicated. Patients were operated by midline incision for different indications, and the closure of the abdominal wall was performed in the same manner using continuous proline-1 stitches in all cases. Demographic data such as age, gender, duration of symptoms and means of calculating standard deviation were noted. Data was analyzed and presented in tabular form and graphs using SPSS software.

RESULTS:

Of the 150 cases, there were 100(66.7 per cent) male and 50(33.3 per cent) female cases. There were 30 (20%) cases between 15-25 years, 38 (25.3%) between 25-35 years, 44 (29.3%) between 36-45 years, 28 (18.7%) between 45-55 years and 10 (6.7%) above the age of 55 years. In 23(15.3 per cent) instances, wound dehiscence was found in 15(10 per cent) male and 8(5.3 per cent) female cases. Typhoid perforation in 40(26.7%) cases, tuberculous perforation of the intestines in 34(22.7%) cases, perforated appendix in 26(17.3%) cases and abdominal trauma in 50 cases were the causes of laparotomy.



DISCUSSION:

Many studies have been performed, and it has been found that wound infection-causing dehiscence is very common in our hospitals after laparotomy, particularly in emergency wards. Perforation of the intestine due to typhoid or T.B leading to peritonitis is an emergency base indication of emergency laparotomy. These patients should be operated on immediately, as the peritonitis mortality rate is very high. Initial steps for managing such patients are immediate fluid resuscitation, antibiotic coverage, stomach decompression and urinary catheterization, with input and output monitoring. This prospective observational study was conducted in a hospital attached to the Allama Iqbal Medical College, Lahore, over six months. It is a tertiary care hospital with an emergency department working 24 hours, in which many operations are performed daily. This study included patients operating in the emergency department during the study duration, regardless of age and gender. This study did not include patients with any malignancy, immune-compromised or taking chemo or radiation therapy. Of the 150 cases, there were 100(66.7 per cent) male and 50(33.3 per cent) female cases. There were 30 (20%) cases between 15-25 years, 38 (25.3%) between 25-35 years, 44 (29.3%) between 36-45 years, 28 (18.7%) between 45-55 years and 10 (6.7%) above the age of 55 years. In 23(15.3 per cent) instances, wound dehiscence was found in 15(10 per cent) male and 8(5.3 per cent) female cases. Abdominal trauma, which is very common in our country due to the high rate of roadside accidents, is another common laparotomy indication. Due to 24 hours of work o.t, the rate of infection in emergency wards is usually higher than elective operation theatres, and infected cases are frequently operated here, so wound infections are common in laparotomy patients in such conditions, which can lead to wound dehiscence. A study conducted in Faisalabad, as we concluded, also produced comparative results.

CONCLUSION:

Wound dehiscence after emergency laparotomy, which is due to improper closure or increased emergency infection rate leading to surgical site infection and wound dehiscence, is common in our hospitals.

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